

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 18

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte CLYDE N. RICHARDS

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Appeal No. 98-0956  
Application 08/385,331<sup>1</sup>

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HEARD: May 3, 1999

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Before COHEN, ABRAMS and STAAB, Administrative Patent Judges.

STAAB, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on an appeal from the examiner's final rejection of claims 1, 3 to 8 and 10 to 23. No other claims are currently pending.

"The present invention concerns devices for producing liquid droplets having large quantities of electric charge, which charged droplets are useful in gas cleaning machines

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<sup>1</sup> Application for patent filed February 8, 1995.

for removal of aerosol particles from gases, by passing the charged droplets through the gas" (specification, page 1). The claimed subject matter before us on appeal is reproduced in an appendix to the brief.

The references of record relied upon by the examiner in support of the rejections are:

Simmons	4,002,293	Jan. 11, 1977
Hobbs et al. (Hobb)	5,265,802	Nov. 30, 1993
Soviet Union reference (Sokolov) <sup>2</sup>	1,214,231	Feb. 28, 1986

Claim 19 stands rejected under 35 U.S.C. § 102(b) as being anticipated by Sokolov.

Claims 1, 3 to 8, 10 to 17, and 19 to 23 stand rejected under 35 U.S.C. § 103 as being unpatentable over Sokolov in view of Simmons.

Claim 18 stands rejected under 35 U.S.C. § 103 as being unpatentable over Sokolov in view of Hobbs.

The rejections are explained in the examiner's answer (Paper No. 11, mailed August 1, 1997) and the supplemental examiner's answer (Paper No. 14, mailed November 18, 1997).

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<sup>2</sup> Our understanding of this foreign language document is based on a certified translation thereof submitted by appellant with the amendment filed August 22, 1966.

The opposing viewpoints of appellant are set forth in the brief (Paper No. 10, filed May 1, 1997) and the reply brief (Paper No. 12, filed September 15, 1997).

Sokolov, the alleged anticipatory reference in the examiner's § 102 rejection and the primary reference in the examiner's § 103 rejections, pertains to a dispersion aerosol generator comprising a liquid supplying tube 6, a rotating spray disk 1, an induction electrode 3 mounted above the periphery of the spray disk, and a pair of precipitating electrodes 4 and 5 mounted beyond the peripheries of the spray disk and induction electrode. The operation of the Sokolov apparatus is described in paragraph 6 of the translation. Briefly, liquid from tube 6 strikes rotating disk 1, where it is dispersed as drops from the edge of the disk through the effect of centrifugal forces. The induction electrode positioned above the disk induces a charge on the drops. The charged drops enter the space between the precipitating electrodes 4 and 5, where relatively smaller drops are precipitated onto the electrode 5 and gathered in the collector 9. Larger drops having sufficient kinetic energy escape the electric field between the precipitating electrodes. By regulating the charge on the precipitating electrodes, the size of the drops that are permitted to escape can be controlled.

Considering first the § 102 rejection of claim 19 based on Sokolov, claim 19 is directed to the non-illustrated embodiment described on page 15, lines 5 to 16 of the specification. Claim 19 calls for an apparatus including, inter alia, "a *single* spray nozzle,

containing *within said nozzle* a means for generating a spreading sheet of liquid upon flow of liquid through said spray nozzle” (emphasis added). Concerning this limitation, the examiner argues that Sokolov discloses “sheet generating means/nozzle (1, 2, 6)” (answer, page 4)<sup>3</sup>, and that “elements 6 and 1 of . . . [Sokolov] are readable as the claimed ‘nozzle’” (final rejection, page 6). This argument is not well taken.

In brief, we agree with appellant’s argument (brief, pages 21 and 22) that liquid supply tube 6 and rotatably driven spray plate 1 of Sokolov are separate elements that cannot reasonably be considered to be parts of one nozzle such that Sokolov’s apparatus could be regarded as having a *single* spray nozzle containing *within the nozzle* means for generating a spreading sheet of liquid, as now claimed. In short, the examiner’s position that elements 6 and 1 of Sokolov satisfy the single spray nozzle requirement of paragraph (a) of claim 19 is simply not reasonable. It follows that we will not sustain this rejection.

Turning to the § 103 rejection of claims 1, 3 to 8, 10 to 17, and 19 to 23 as being unpatentable over Sokolov in view of Simmons, independent claim 1 is directed to an apparatus comprising means for generating a spreading sheet of liquid comprising stream

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<sup>3</sup> In response to an argument presented in the reply brief, it appears that the examiner has made an improper and unauthorized alteration to page 7 of the *mailed* examiner’s answer by changing “19” to --18-- in each of lines 6 and 9 and adding his initials in the margin next to the change. See paragraph 2 of the supplemental examiner’s answer. An otherwise improper alteration of an official *mailed* communication is not made proper by adding one’s initials in the margin next to the alteration because this practice does not notify appellant of the change in the record.

generating means “for generating opposing colliding streams of flowing liquid.”

Independent method claim 8 is similar in that it requires that the step of generating the spreading sheet of liquid “comprises generating opposing colliding streams of flowing liquid.”

There is no dispute that Sokolov, the examiner’s primary reference, does not meet these claim limitations. The examiner contends, however, that it would have been obvious to one of ordinary skill in the art “to have provided the [Sokolov] reference with the alternate sheet generating means, taught by Simmons, so as to allow the shape and characteristic of the sheet to be changes [sic, changed]” (answer, page 4). We do not agree.

Simmons relates to a method and apparatus for shaping and positioning fluid dispersal patterns “for use in decorative water fountains, dish washers, and the like” (abstract). We appreciate that in Simmons the liquid patterns are formed by opposing colliding streams of flowing liquid. We also appreciate that *if* Sokolov were modified in the manner proposed by the examiner, the subject matter of claims 1 and 8 may very well result. Nevertheless, we view the examiner’s combination as a hindsight reconstruction based solely on appellant’s disclosure and not on anything fairly suggested by the references themselves. The dissimilarity of purpose of the applied references, as well as the diverse manner in which they handle the fluid, belies their combination in the absence of the teachings found in appellant’s disclosure. In this regard, the examiner’s rationale for

the rejection, namely, “so as to allow the shape and characteristic of the sheet to be change[d]” (answer, page 4) is insufficient to justify the combination. Accordingly, we will not sustain the § 103 rejection of claims 1 or 8, or claims 3 to 7, 10 to 17 and 20 to 23 that depend from claim 1.

Concerning the examiner’s § 103 rejection of claim 19 as being unpatentable over Sokolov in view of Simmons, the Simmons reference does not render obvious what we have found to be lacking in Sokolov, that is, “a single spray nozzle, containing within said nozzle a means for generating a spreading sheet of liquid” as called for in paragraph (a) of that claim. Accordingly, the § 103 rejection of claim 19 also will not be sustained.

Turning to the examiner’s § 103 rejection of claim 18 as being unpatentable over Sokolov in view of Hobbs, claim 18 distinguishes over Sokolov in that it requires a *fixed* target, placed in the stream of flowing liquid for generating the sheet of liquid. The Hobbs reference relied upon by the examiner for this feature pertains to a fluid projection screen system comprising a fluid projection screen 23 formed by deflecting a stream of water from a nozzle 38 off a fixed deflection plate 56. A projector 18 projects an image upon the screen. The Hobbs reference is no more pertinent to Sokolov than the Simmons reference relied upon by the examiner in rejecting claim 1 et al. As with the § 103 rejection discussed above, the examiner’s combination is based solely on appellant’s disclosure and not on anything fairly suggested by the references themselves.

Appeal No. 98-0956  
Application 08/385,331

Accordingly, the § 103 rejection of claim 18 also will not be sustained.

The decision of the examiner is reversed.

REVERSED

IRWIN CHARLES COHEN  
Administrative Patent Judge

NEAL E. ABRAMS  
Administrative Patent Judge

LAWRENCE J. STAAB  
Administrative Patent Judge

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Appeal No. 98-0956  
Application 08/385,331

Robert W. Harris  
5906 Painted Pony Dr., N.W.  
Albuquerque, NM 87120